IN THE CLAIMS:

The following is a complete listing of claims in this application.

Claims 1-18 (canceled).

19. (new) An opalescent glass ceramic which is devoid of ZrO_2 and TiO_2, and which comprises an Me(II)O component in an amount of less than 4% by weight, and an $Me(IV)O_2$ component in an amount of 0.5 to 3% by weight, the glass ceramic consisting essentially of:

Component	% by weight
SiO_2	55 - 62
Al_2O_3	13 - 17
B_2O_3	0 - 2
P_2O_5	1.5 - 3
Li_2O	0 - 2
Na_2O	7 - 12
K_2O	8 - 12
MgO	0 - 2
CaO	1 - <4
BaO	0 - 2
Tb_2O_3	0 - 3
$Me(IV)O_2$	0.5 - 3

wherein said $Me(IV)O_2$ consists essentially of 0-1% by weight CeO_2 and 0-2.5% by weight SnO_2, and

wherein the glass ceramic has a thermal expansion coefficient (TEC) in the range of 9.0 - 13.5 x 10^{-6}/K.

20. (new) The opalescent glass ceramic according to claim 19, wherein Me(II)O is present in an amount of 2-3.5% by weight.

21. (new) The opalescent glass ceramic according to claim 19, having a composition of:

Component	% by weight
SiO_2	58 - 60
Al_2O_3	14 - 15

LAW OFFICES
DENNISON, SCHULTZ & MACDONALD
SUITE 105
1727 KING STREET
ALEXANDRIA, VIRGINIA 22314-2700
703 837-9600

P_2O_5	2.3 - 2.6
Na_2O	9.5-10.5
K_2O	9 - 10
CaO	2.8 - 3
Tb_2O_3	0 - 2
CeO_2	0.3-0.4
SnO_2	1.3 - 1.6

22. (new) The opalescent glass ceramic according to claim 19, which is a dental material or an additive for a dental material.

23. (new) The opalescent glass ceramic according to claim 19, wherein the thermal expansion coefficient (TEC) is in the range of 10.5 -12.0 x 10^{-6}/K.

24. (new) A method for producing an opalescent glass ceramic which is devoid of ZrO_2 and TiO_2, which has a thermal expansion coefficient (TEC) in the range of 9.0 - 13.5 x 10^{-6}/K, and which comprises an Me(II)O component in an amount of less than 4% by weight and an $Me(IV)O_2$ component in an amount of 0.5 to 3% by weight, comprising the steps of:

mixing together the components:

Component	% by weight
SiO_2	55 - 62
Al_2O_3	13 - 17
B_2O_3	0 - 2
P_2O_5	1.5 - 3
Li_2O	0 - 2
Na_2O	7 - 12
K_2O	8 - 12
MgO	0 - 2
CaO	1 - 4
BaO	0 - 2
Tb_2O_3	0 - 3
$Me(IV)O_2$	0.5 - 3

wherein said $Me(IV)O_2$ consists essentially of 0-1% by weight CeO_2 and 0-2.5% by weight SnO_2,

LAW OFFICES
DENNISON, SCHULTZ & MACDONALD
SUITE 105
1727 KING STREET
ALEXANDRIA, VIRGINIA 22314-2700
703 837-9600

- melting the mixture in a furnace;

- quenching the molten mass from the furnace in a water bath and drying to form a frit;

- grinding the frit in a mill;

- tempering the ground frit; and

- sifting the ground frit through a sieve.

25. (new) The method according to claim 24, wherein the tempering of the frit comprises the steps of:

- stacking the ground frit on quartz-coated fire-clay plates,

- placing the fire-proof plates in a furnace heated to a temperature T with 850°C ≤ T ≤ 1000°C, thereby fusing the ground frit,

- removing the plates from the furnace after a time t with 30 min ≤ t ≤ 60 min, and

- quenching the fused frit in a water bath.

26. (new) The method according to claim 24, wherein the components are mixed in a gyro mixer.

27. (new) The method according to claim 24, wherein the mixture is melted in a gas-heated drip-feed crucible furnace.

28. (new) The method according to claim 24, wherein the grinding step comprises filling the frit into a ball mill and grinding at about 10,000 revolutions per minute.

29. (new) The method according to claim 24, wherein the ground frit is sifted through a sieve having a mesh size M in the range of 80 μm ≤ M ≤ 120 μm.

30. (new) The method according to claim 25, wherein the ground frit is fused at a temperature of 870 to 970° C.

LAW OFFICES
DENNISON, SCHULTZ & MACDONALD
SUITE 105
1727 KING STREET
ALEXANDRIA, VIRGINIA 22314-2700
703 837-9600